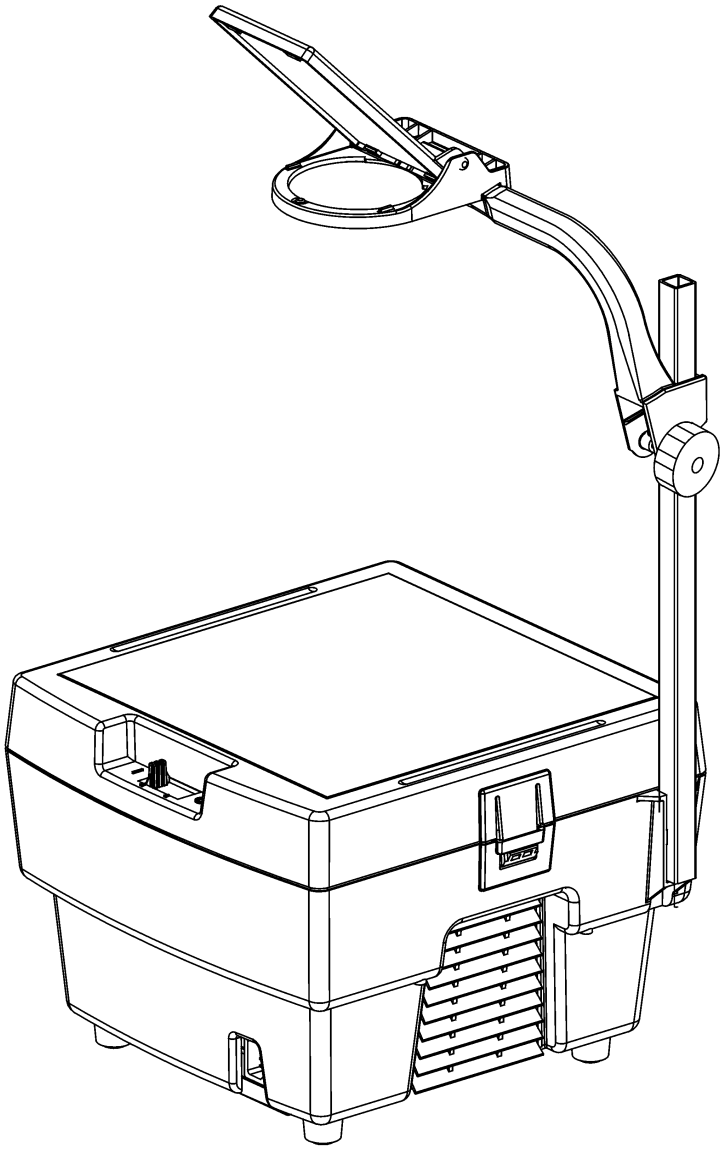
1600 Overhead Projector

Illustrated Parts Breakdown



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Revision History

Original Issue date: 8/2002

The release date, revision level, pages changed and a description of the modifications are listed below.

Revision	Date	Page(s) Changed	Description
Rev A	4/2001	All pages	First edition released
Rev B	8/2002	Table Of Contents, Quick Reference Parts Index, and Figure 0, Pages 2, 3, and 4	Removed reference for 230V Electrical Small Parts Kit, Figure 9.
		Figure 1, Page 6	Removed part numbers for Arm and Post assemblies and added Note 1.
		Figure 5, Pages 12 and 13	Removed item #3, Reflector, Aluminized Glass.
		Figure 8, Page 17	Changed Kit name to Small Parts Kit and changed kit number from 78-8120-8471-9 to 78-8120-8486-7. Updated list of included parts.
		Figure 9, Page 18	Removed Figure 9. Combined 120/127V and 230V Kits into one Small Parts Kit on Figure 8.

NOTE: Blue text indicates a link to that page.

Illustrated Parts Breakdown (IPB)

This Illustrated Parts Breakdown (IPB) Manual contains the information necessary to locate and identify assemblies, sub-assemblies, and specific parts of the 1600 Overhead Projector.

Part Numbers

All components available on a replacement basis are listed with their 3M identification number. The parts identification list opposite each illustration provides the description adequate to identify components. If the component is available only as part of the next higher assembly, the description column provides the next higher assembly description or identification number.

Locating and Identifying a Part

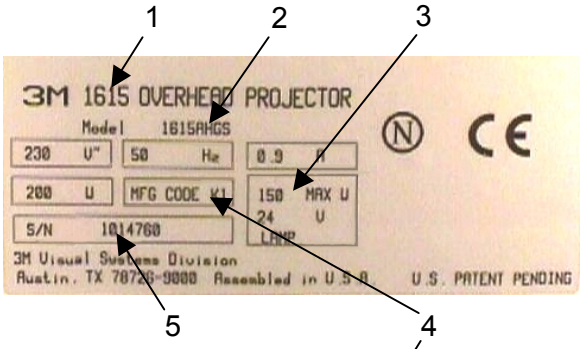
If physical appearance and general location of an item are known:

1. Use the IPB Section Titles to help determine which assembly or sub-assembly includes the item.
2. Refer to the view for the assembly or sub-assembly and locate the item on the exploded view. Match the part callout number to the corresponding number in the parts list.
3. Parts shown inside a dashed box can only be ordered as a module or kit. Any part or mounting hardware shown outside the box is not included with the assembly.

Machine Identification Plate

The serial number plate for the 1600 is located on the bottom of the projector. The Machine Identification Plate is divided into the following components:

1. Product Name: The specific version number of the projector.
2. Model Number/Alpha Code: The series number of the projector followed by a three or four character alpha code identifier. The Alpha Code indicates the design level, specific product characteristics, power cord or distribution specific to a country.
3. Lamp: The electrical rating of the lamp.
4. MFG Code: The MFG Code indicates the year and quarter the projector was built. (See the example to the right):
5. S/N: The serial number assigned to this projector.



MFG Code			
Letter		Digit	
H	1999	1	Jan-Mar
J	2000	2	Apr-Jun
K	2001	3	Jul-Sep
L	2002	4	Oct-Dec
M	2003	1	Jan-Mar

Ordering Parts

When ordering parts, include the following information:

1. Machine model number and serial number.
2. Parts identification number.
3. Part description.
4. Quantity required.

For U.S. retail customers: Call 1-800-650-8429, or fax 1-800-650-9268. Dealers: Refer to Dealers Guide. 3M Subsidiaries: Contact Export Operations.

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IMPORTANT NOTICE

3M reserves the right to sell or furnish NEW OR RECONDITIONED PARTS.
New and reconditioned parts are covered by the same 3M new parts limited warranty.

Quick Reference Parts Index

Description	Part Number	Figure No.	Item No.
Mirror Module (10 inch and A4 Stage)	78-8120-8444-6	1 and 2	1
Head Module (10 inch and A4 Stage)	78-8120-8478-4	1 and 2	2
Arm/Post Module (A4 Stage)	78-8120-8465-1	2	3
Focus Kit (A4 Stage)	78-8120-8466-9	2	4
Stage Module (10 inch)	78-8120-8468-5	3	1A
Stage Module (A4)	78-8120-8469-3	3	1B
Fresnel Lens, Single Element (10 inch Stage)	78-8120-8487-5	3	2A
Fresnel Lens, Dual Element (A4 Stage)	78-8120-8488-3	3	2B
Lamp, Projection, FCS, 150W, 24V (10 inch and A4 Stage)	78-8120-3026-6	5 and 6	2
Lamp Module (U.S. version, lamp, on/off switch)	78-8120-8474-3	5	4A
Lamp Module (Latin America version, lamp, interlock)	78-8120-8473-5	5	4B
Lamp Module (A4 Stage, lamp, reflector)	78-8120-8475-0	6	4
Condenser Module (A4 Stage)	78-8120-8476-8	6	1
Reflector, Aluminized Glass	- - -	5 and 6	3
Hardware Kit	78-8120-8477-6	7	0
Small Parts Kit	78-8120-8486-7	8	0

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Figure 0. Machine Overview

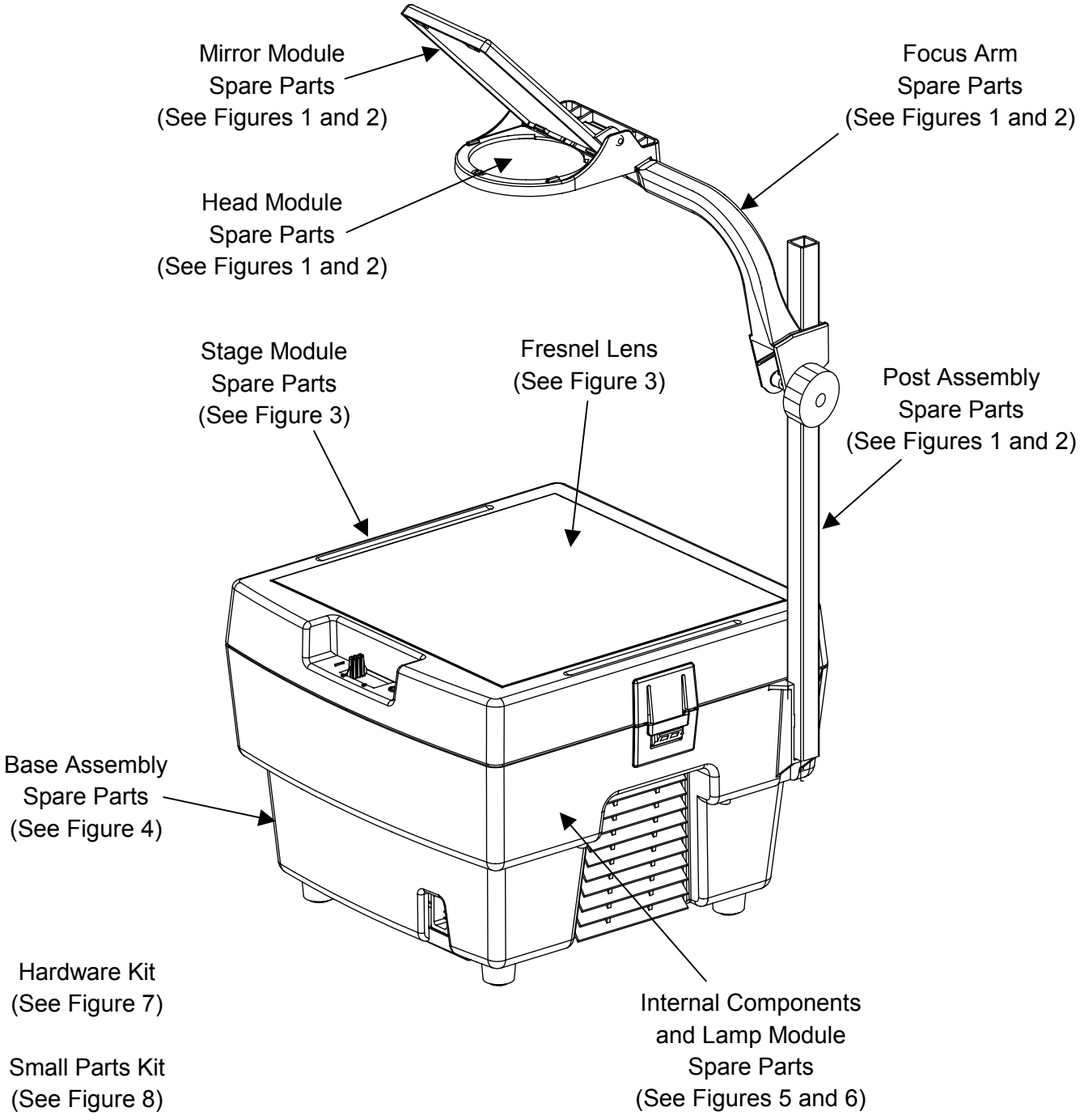

Figure 1. Head and Focus Arm Assembly (10 inch Stage)

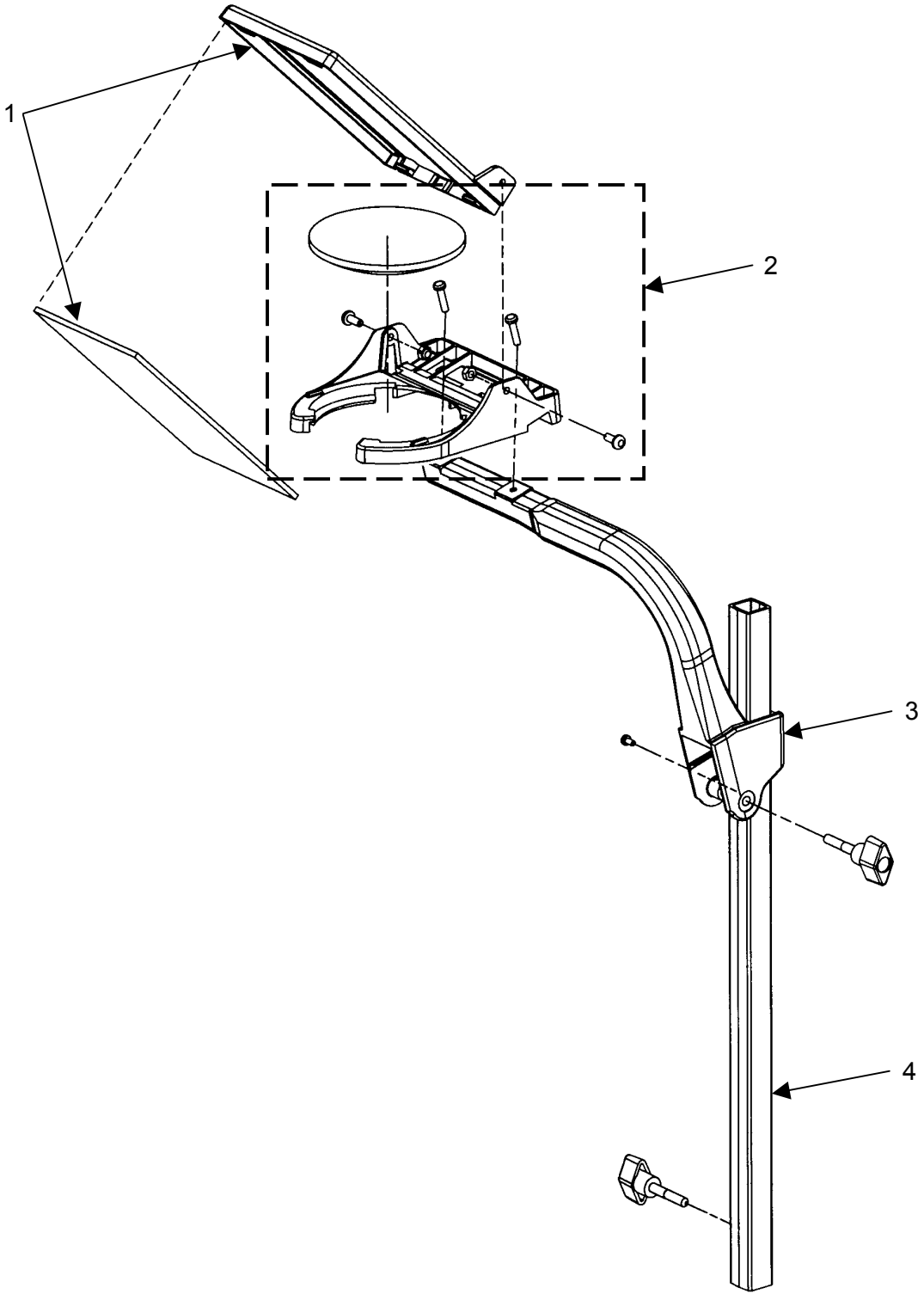

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Figure 1. Head and Focus Arm Assembly (10 inch Stage) Parts List

Item No.	3M Part Number	Description	Qty.
1	78-8120-8444-6	Mirror Module	1
2	78-8120-8478-4	Head Module	1
3	(See Note 1)	Arm, Focus	1
4	(See Note 1)	Post	1

NOTE 1:
Please contact the 3M Parts Center for ordering information on these items.

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Figure 2. Head and Focus Arm Assembly (A4 Stage)

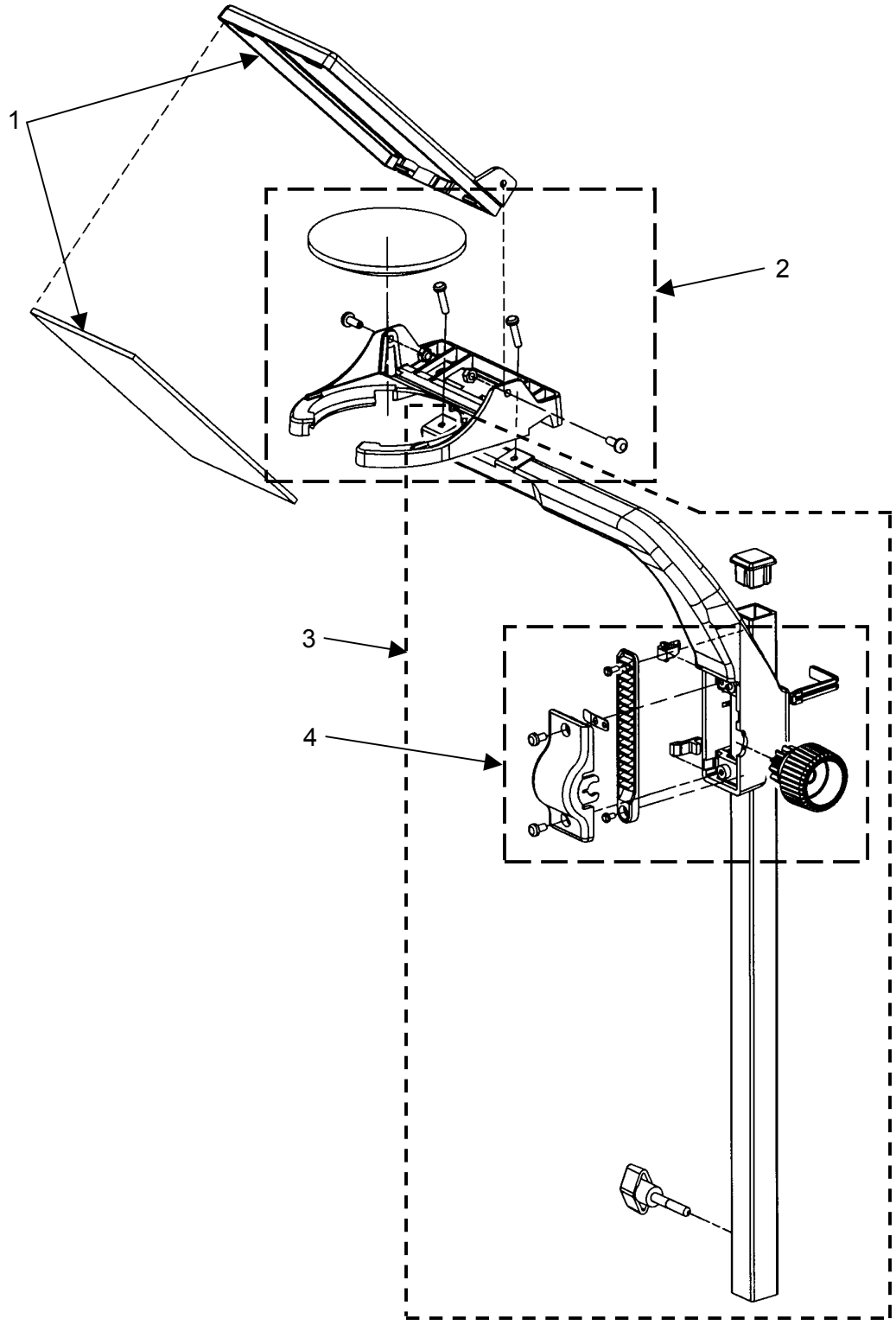

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Figure 2. Head and Focus Arm Assembly (A4 Stage) Parts List

Item No.	3M Part Number	Description	Qty.
1	78-8120-8444-6	Mirror Module	1
2	78-8120-8478-4	Head Module	1
3	78-8120-8465-1	Arm/Post Module (Includes Focus Kit, item #4)	1
4	78-8120-8466-9	Focus Kit	1

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Figure 3. Top Cover Assembly

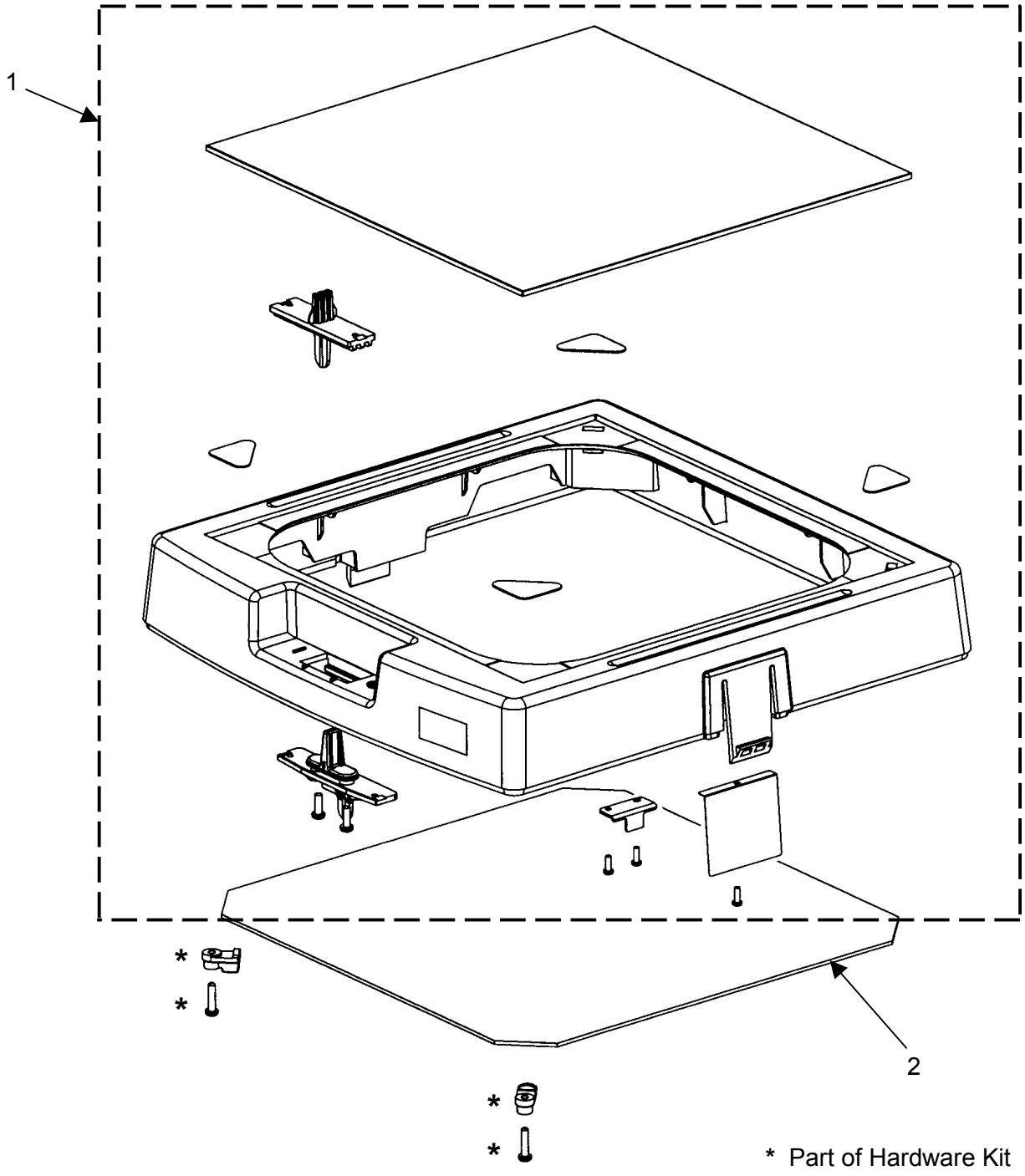

Figure 3. Top Cover Assembly Parts List

Item No.	3M Part Number	Description	Qty.
1A	78-8120-8468-5	Stage Module (10 inch)	1
1B	78-8120-8469-3	Stage Module (A4)	1
2A	78-8120-8487-5	Fresnel Lens, Single Element (10 inch Stage)	1
2B	78-8120-8488-3	Fresnel Lens, Dual Element, 300mm (A4 Stage)	1

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Figure 4. Base Assembly

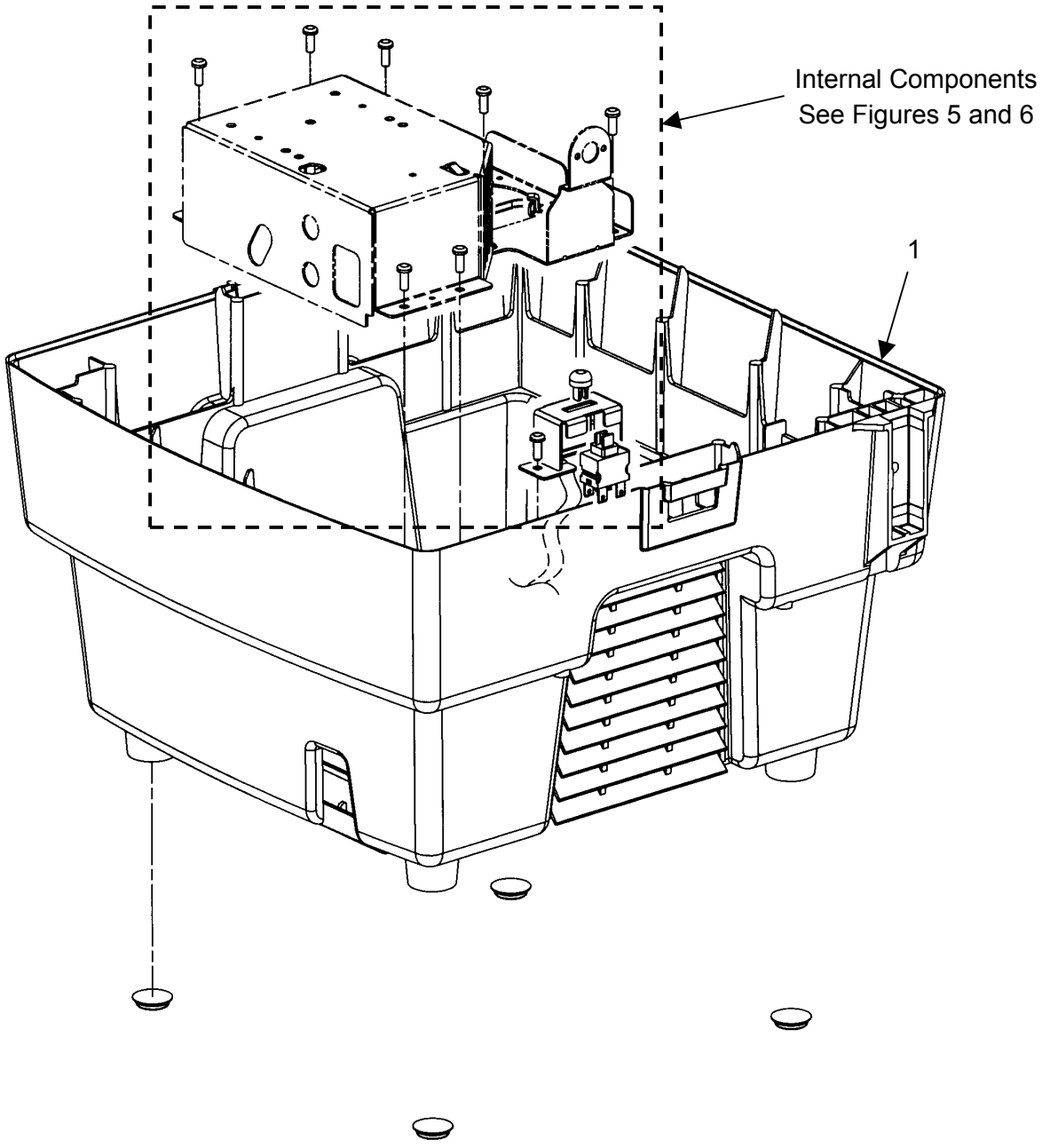

Figure 4. Base Assembly Parts List

Item No.	3M Part Number	Description	Qty.
1	78-8120-3035-7	Base Assembly	1

Figure 5. Internal Components (10 inch Stage)

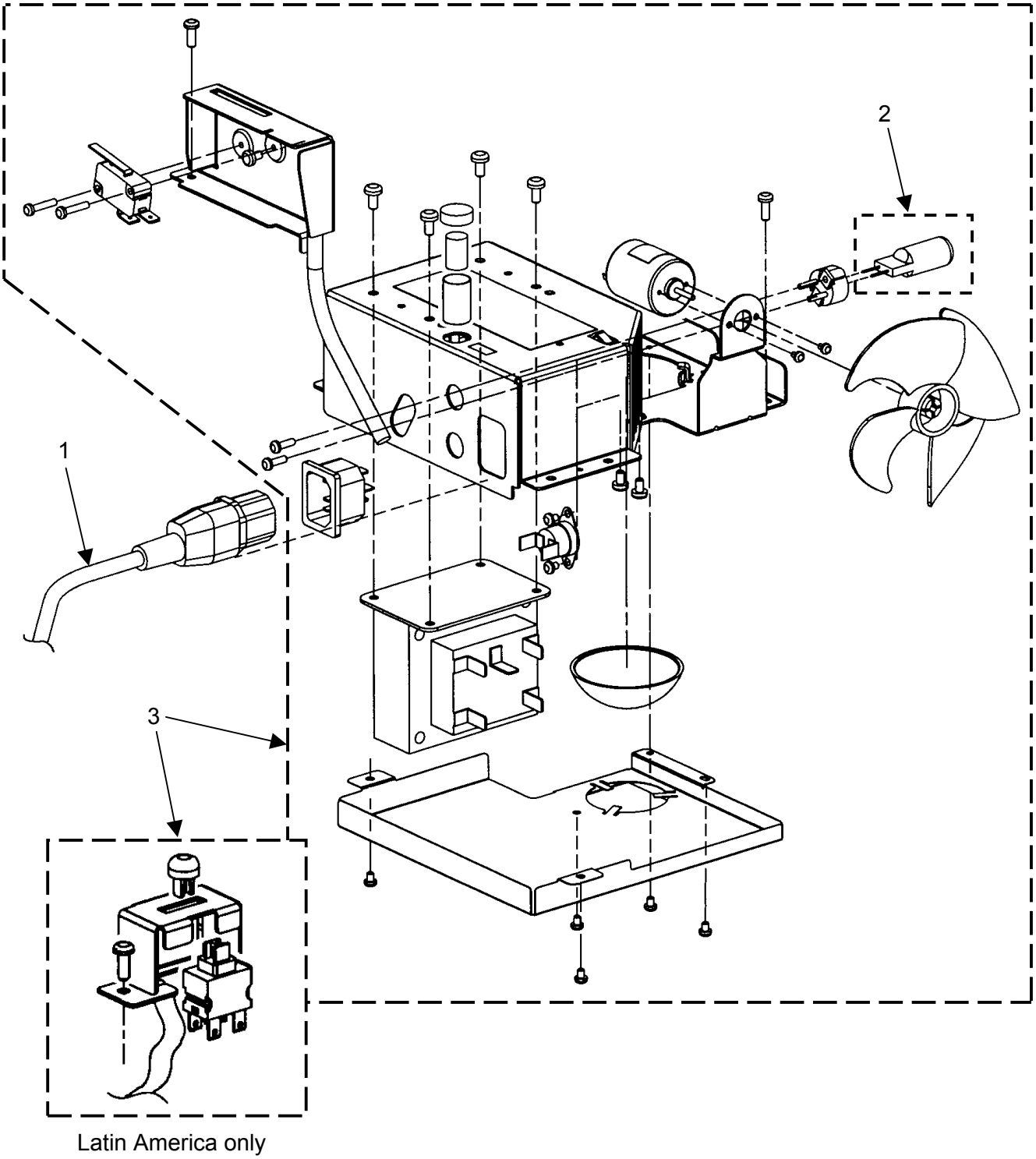

Figure 5. Internal Components (10 inch Stage) Parts List

Item No.	3M Part Number	Description	Qty.
1	78-8120-2997-9	Power Cord, 10 ft.	1
2	78-8120-3026-6	Lamp, Projection, FCS, 150W, 24V	1
3A	78-8120-8474-3	Lamp Module (U.S. version with On/Off Switch) (Includes item #2)	1
3B	78-8120-8473-5	Lamp Module (Latin America version with Interlock Switch) (Includes item #2)	1

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Figure 6. Internal Components (A4 Stage)

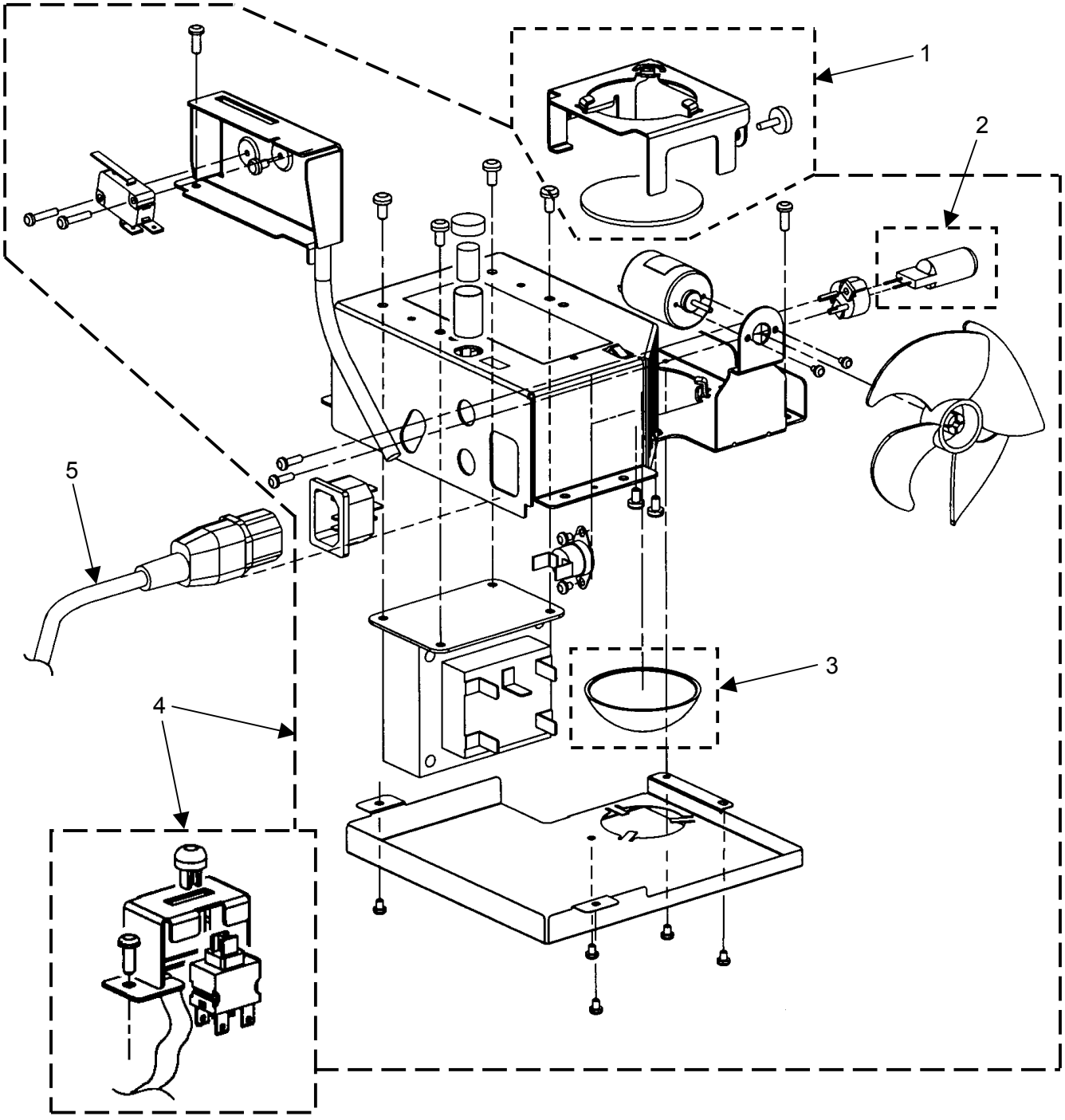

Figure 6. Internal Components (A4 Stage) Parts List

Item No.	3M Part Number	Description	Qty.
1	78-8120-8476-8	Condenser Module	1
2	78-8120-3026-6	Lamp, Projection, FCS, 150W, 24V	1
3	- - -	Reflector, Aluminized Glass	1
4	78-8120-8475-0	Lamp Module (with Interlock Switch) (Includes items #2 and 3)	1
5A	- - -	Power Cord, Argentina	1
5B	- - -	Power Cord, Chile	1
5C	- - -	Power Cord, Europe	1
5D	- - -	Power Cord, India	1
5E	- - -	Power Cord, South Africa	1
5F	- - -	Power Cord, Taiwan	1
5G	- - -	Power Cord, United Kingdom	1

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Figure 7. Hardware Kit (No Picture)

Item No.	3M Part Number	Description	Qty.
0	78-8120-8477-6	Hardware Kit	1
Kit Includes:			
1	- - -	Screw, Plastite, 6-19x5/16, Zn	5
2	- - -	Screw, Taptite, M3.5x6, Zn	5
3	- - -	Screw, Taptite, Sems, M4x8, Zn	5
4	- - -	Screw, Type BT, 8-18x5/16, Zn	10
5	- - -	Screw, Plastite, 6-19x3/8, Bzn	5
6	- - -	Screw, Taptite, M3x16, Zn	5
7	- - -	Screw, Taptite, M3x4, Zn	10
8	- - -	Nut, Hex, M4, Nylon Locknut, Stl, Zn	5
9	- - -	Actuator, Interlock	3
10	78-8120-3022-5	Actuator, Switch, A4	2
11	- - -	Lever, Switch Slide	2
12	- - -	Screw, Plastite, 4-20x1/4L, Zn	5
13	- - -	Cap, 0.750 Post	2
14	- - -	Screw, Taptite, Flat Head, 4-40x3/8	5
15	- - -	Screw, Machine, Metric, M2.6x6 L	5
16	- - -	Screw, Machine, Metric, M3x8, Zn	5
17	- - -	Screw, Plastite, 6-19x5/8, Zn	5
18	78-8120-2977-1	Slide, On/Off	2
19	- - -	Retainer, Fresnel Lens	5
20	- - -	Screw, Machine, Metric, M4x12, Zn	5
21	- - -	Screw, Wing	5
22	- - -	Bump-Ons, Black	5

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Figure 8. Small Parts Kit (No Picture)

Item No.	3M Part Number	Description	Qty.
0	78-8120-8486-7	Small Parts Kit	1
Kit Includes:			
1	78-8120-2992-0	Socket, F511470	5
2	78-8120-3001-9	Thermostat	2
3	- - -	Connector, IEC	1
4	- - -	Fuse	5
5	- - -	Fuse, 4 Amp, 5x20mm, Time Lag	5
6	- - -	Fuse Holder	2
7	- - -	Switch, On/Off	2
8	78-8114-8942-2	Switch, Interlock	2
9	- - -	Reflector, Aluminized Glass	2
10	78-8120-2993-8	Blade, Fan, 2.305mm Shaft	3
11	- - -	Motor, Fan with Capacitor	2

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APPENDIX A – 1600 SERIES SPECIFICATIONS

Model Alpha	1610 AJA	1612 AAAL	1612 AAAM	1615 AHGS	1615 AHGU	1615 AAGP
Country	United States	United States	United States			
Power Cord	United States	United States	United States	Europe	United Kingdom	Taiwan
Stock Number	78-9236-6504-2	78-9236-6531-5	78-9236-6505-9	78-9236-6538-0	78-9236-6539-8	78-9236-6545-5
Voltage/Hz	120/60		127/60			
Agency						
Stage Size	10 inch	10 inch	10 inch	A4	A4	A4
Head Type	Open Singlet	Open Singlet	Open Singlet	Open Singlet	Open Singlet	Closed Singlet
Lamp Changer	No	No	No	No	No	No
Color Tuning	No	No	No	Internal	Internal	Internal
Post Type	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed
Lamp Type	FCS	FCS	FCS	FCS	FCS	FCS
Handle	No	No	No	No	No	No
Lamp Control	No	No	No	No	No	No
Lamps Installed	1	1	1	1	1	1
Fresnel	Single Element	Single Element	Single Element	Dual Element	Dual Element	Dual Element
Power						
Fuse	No		No			
Amps						
Cord Storage	No	No	No	No	No	No

APPENDIX A – 1600 SERIES SPECIFICATIONS (Continued)

Model Alpha	1615 AAGT	1615 AHGA	1615 AHGC	1615 AHGE	1615 AHGF	1615 AHGG
Country						
Power Cord	Taiwan	Australia	Chile	United Kingdom	Europe	India
Stock Number	78-9236-6546-3	78-9236-6547-1	78-9236-6548-9	78-9236-6549-7	78-9236-6550-5	78-9236-6551-3
Voltage/Hz						
Agency						
Stage Size	A4	A4	A4	A4	A4	A4
Head Type	Open Singlet	Open Singlet	Open Singlet	Open Singlet	Open Singlet	Open Singlet
Lamp Changer	No	No	No	No	No	No
Color Tuning	Internal	Internal	Internal	Internal	Internal	Internal
Post Type	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed
Lamp Type	FCS	FCS	FCS	FCS	FCS	FCS
Handle	No	No	No	No	No	No
Lamp Control	No	No	No	No	No	No
Lamps Installed	1	1	1	1	1	1
Fresnel	Dual Element	Dual Element	Dual Element	Dual Element	Dual Element	Dual Element
Power						
Fuse						
Amps						
Cord Storage	No	No	No	No	No	No

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APPENDIX A – 1600 SERIES SPECIFICATIONS (Continued)

Model Alpha	1615 AHGI	1615 AHGN	1615 AHGR	1615 AHGX	1615 AHGV	1615 AHGK
Country						
Power Cord			South Africa	Taiwan	United Kingdom	Europe
Stock Number	78-9236-6552-1	78-9236-6553-9	78-9236-6554-7	78-9236-6568-7	78-9236-6569-5	78-9236-6605-7
Voltage/Hz						
Agency						
Stage Size	A4	A4	A4	A4	A4	A4
Head Type	Open Singlet	Open Singlet	Open Singlet	Open Singlet	Open Singlet	Open Singlet
Lamp Changer	No	No	No	No	No	No
Color Tuning	Internal	Internal	Internal	Internal	Internal	Internal
Post Type	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed
Lamp Type	FCS	FCS	FCS	FCS	FCS	FCS
Handle	No	No	No	Yes	Yes	No
Lamp Control	No	No	No	No	No	No
Lamps Installed	1	1	1	1	1	1
Fresnel	Dual Element	Dual Element	Dual Element	Dual Element	Dual Element	Dual Element
Power						
Fuse						
Amps						
Cord Storage	No	No	No	No	No	No

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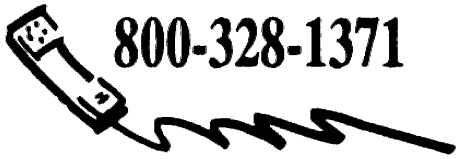
APPENDIX A – 1600 SERIES SPECIFICATIONS (Continued)

Model Alpha	1615 AHGL	1620 AJCW	38900 AJAW (Universal)			
Country		United States	United States			
Power Cord	United Kingdom	United States	United States			
Stock Number	78-9236-6607-3	78-9236-6544-8	78-9236-6534-9			
Voltage/Hz						
Agency						
Stage Size	A4	10 inch	10 inch			
Head Type	Open Singlet	Open Singlet	Open Singlet			
Lamp Changer	No	No	No			
Color Tuning	Internal	Internal	No			
Post Type	Fixed	Fixed	Fixed			
Lamp Type	FCS	FCS	FCS			
Handle	No	No	No			
Lamp Control	No	No	No			
Lamps Installed	1	1	1			
Fresnel	Dual Element	Single Element	Single Element			
Power						
Fuse			No			
Amps						
Cord Storage	No	No	No			



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